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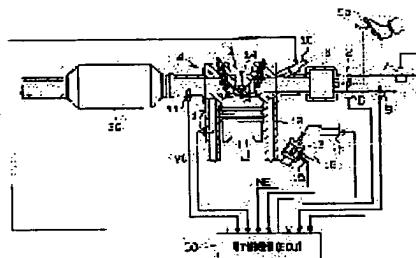
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(54) IGNITION TIMING CONTROLLER OF INTERNAL COMBUSTION ENGINE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an ignition timing controller of an internal combustion engine capable of controlling the generation of carbon monoxide (CO) and hydrocarbon (HC) and the like in the exhaust while improving catalyst warm up efficiency after engine startup.

SOLUTION: An Electronic Control Unit(ECU) 30 controls the air-fuel ratio feedback of the fuel injection quantity based on a detection signal of an oxygen sensor 11 provided in an exhaust system 4 of an engine 1, while controlling the ignition timing related to combustion within a combustion chamber 3. Also, after startup of the engine 1, the ECU 30 delays the ignition timing and improves early activation of a three-way catalyst 20 for exhaust purification provided in the exhaust system 4. Meanwhile, after increasing the warm up of a predetermined time after engine startup, the air-fuel ratio feedback control based on the detection signal from the oxygen sensor 11 optimizes the average exhaust characteristics after engine startup by releasing the delay angle suppression of the ignition timing after the fuel injection quantity reverses from a large amount to a small amount.



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